

REMARKS:Status

Claims 1 to 8, 10, and 12 to 26 are pending. Claims 1, 4, 12, 21, 25 and 26 are the independent claims and have been amended. Reconsideration and further examination are respectfully requested.

Claim Rejection

All pending claims were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,026,448 (Goldrian) in view of U.S. Patent No. 6,499,028 (Brock).

Discussion

The rejection of the claims is discussed below, grouped according to independent claim.

Claims 1 to 3: Claim 1 is reproduced here as amended:

1. A method, including steps of
 sending data between a client and a server using at least one of plural data buffers of different sizes both in said client and in said server, at least some of said data buffers both in said client and in said server matched to sizes of data blocks to be transferred into or out of those data buffers;
 wherein said step of sending selects one or more of said data buffers for a data transfer responsive to a size of data blocks for said data transfer.

The applied art is not seen to disclose or to suggest the foregoing features of claim 1, at least with respect to “at least some of said data buffers both in said client and in said server matched to sizes of data blocks to be transferred into or out of those data buffers.”

In this regard, Brock was cited as teaching “data transaction matched in the corresponding region or memory block sizes.” See Office Action, ¶ 4. Applicant initially submits that this is not what was recited by claim 1. Rather, claim 1 recited matching data buffers to sizes of data blocks, not to sizes of “transactions.”

Claim 1 has been amended to recite “at least some of said data buffers **both in said client and in said server** matched to sizes of data blocks to be transferred into or out of those data buffers” (emphasis added). Applicant does not see anything in Brock, which is concerned with a performance monitor, that suggests such matching both in a client and in a server. This matching is non-trivial in that it can simplify and improve the efficiency of data transfers.

As noted in paragraph 4 of the Office Action, “Goldrian does not explicitly disclose plural data buffers of different sizes, at least some of said data buffers matched to sizes of data blocks to be transferred into or out of those data buffers.” Goldrian therefore does not offer anything that remedies the foregoing deficiencies of Brock.

In view of the foregoing, reconsideration and withdrawal are respectfully requested of the rejection of claim 1 and its dependent claims.

Claims 4 to 8 and 10: Claim 4 is reproduced here as amended:

4. A system including
a client and server;
a NUMA communication link coupled to said client and server; and

plural data buffers of different sizes both in said client and in said server for data transfers between said client and said server using said NUMA communication link, at least some of said data buffers both in said client and in said server matched to sizes of data blocks to be transferred into or out of those data buffers;

wherein one or more of said data buffers is selected for a data transfer responsive to a size of data blocks for said data transfer.

The applied art is not seen to disclose or to suggest the foregoing features of claim 4, at least with respect to “at least some of said data buffers both in said client and in said server matched to sizes of data blocks to be transferred into or out of those data buffers.” Substantially as discussed above with respect to claim 1, the combination of Brock and Goldrian is not seen to teach this feature. Therefore, reconsideration and withdrawal are respectfully requested of the rejection of claim 4 and its dependent claims.

Claims 12 to 20: Claim 20 is reproduced here as amended:

12. A system including

a server, said server having a memory including a client communication region and a data transfer region, said data transfer region having plural data buffers of different sizes for data transfers to and from a client, at least some of said data buffers matched to different sizes of data blocks to be transferred into or out of those data buffers and matched to different sizes of data buffers in said client that are also matched to said different sizes of said data blocks to be transferred; and

a remote DMA communication link coupled to said data transfer region;

wherein said client communication region includes information regarding a data transfer into or out of said data transfer region; and

wherein one or more of said server data buffers is selected for a data transfer responsive to a size of data blocks for said data transfer.

The applied art is not seen to disclose or to suggest the foregoing features of claim 12, at least with respect to “at least some of said data buffers matched to different sizes of data blocks to

be transferred into or out of those data buffers and matched to different sizes of data buffers in said client that are also matched to said different sizes of said data blocks to be transferred.” While worded differently because this claim recites only the server side, this claim also necessitates that at least some of the data buffers both in the client and in the server are matched to sizes of data blocks to be transferred into or out of those data buffers. Substantially as discussed above with respect to claim 1, the combination of Brock and Goldrian is not seen to teach this feature. Therefore, reconsideration and withdrawal are respectfully requested of the rejection of claim 20 and its dependent claims.

Claims 21 to 24: Claim 21 is reproduced here as amended:

21. A method including
communicating file system requests and responses between a client
and a file server;
sending data between said client and said file server using a memory
access operation involving at least one of plural data buffers of different sizes
both in said client and in said file server, at least some of said data buffers
both in said client and in said file server matched to sizes of data blocks to be
transferred into or out of said data buffers, wherein selection of one or more
of said data buffers is responsive to information in said requests or said
responses and is responsive to a size of data blocks for said memory access
operation.

The applied art is not seen to disclose or to suggest the foregoing features of claim 21, at least with respect to “at least some of said data buffers both in said client and in said file server matched to sizes of data blocks to be transferred into or out of said data buffers.” Substantially as discussed above with respect to claim 1, the combination of Brock and Goldrian is not seen to teach this feature. Therefore, reconsideration and withdrawal are respectfully requested of the rejection of claim 21 and its dependent claims.

Claim 25: Claim 25 is reproduced here as amended:

25. A method including
communicating file system requests and responses between a client
and a database server;
sending data between said client and said database server using a
memory access operation involving at least one of plural data buffers of
different sizes both in said client and in said database server, at least some of
said data buffers both in said client and in said database server matched to
sizes of data blocks to be transferred into or out of said data buffers, wherein
selection of one or more of said data buffers is responsive to information in
said requests or said responses and is responsive to a size of data blocks for
said memory access operation.

The applied art is not seen to disclose or to suggest the foregoing features of claim 25,
at least with respect to “at least some of said data buffers both in said client and in said database
server matched to sizes of data blocks to be transferred into or out of said data buffers.”
Substantially as discussed above with respect to claim 1, the combination of Brock and Goldrian is
not seen to teach this feature. Therefore, reconsideration and withdrawal are respectfully requested
of the rejection of claim 25.

Claim 26: Claim 26 is reproduced here as amended:

26. A method including
communicating requests and responses between a client and a server;
sending data between said client and said server using a memory
access operation involving at least one of plural data buffers of different sizes
both in said client and in said server, at least some of said data buffers both in
said client and in said server matched to sizes of data blocks to be transferred
into or out of said data buffers, wherein selection of one or more of said data
buffers is responsive to information in said requests or said responses and is
responsive to a size of data blocks for said memory access operation.

The applied art is not seen to disclose or to suggest the foregoing features of claim
256 at least with respect to “at least some of said data buffers both in said client and in said server

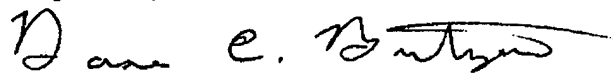
matched to sizes of data blocks to be transferred into or out of said data buffers.” Substantially as discussed above with respect to claim 1, the combination of Brock and Goldrian is not seen to teach this feature. Therefore, reconsideration and withdrawal are respectfully requested of the rejection of claim 26.

Closing

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner’s earliest convenience.

Applicant’s undersigned attorney can be reached at (614) 486-3585. All correspondence should continue to be directed to the address indicated below.

Respectfully submitted,



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